

ARI Research Note 2001-01

**Contract for Manpower and Personnel Research and  
Studies II (COMPRS-II) Annual Report -- Year Two**

**Human Resources Research Organization**

**Office of the Technical Director  
Zita M. Simutis**

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**U.S. Army Research Institute  
for the Behavioral and Social Sciences**

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**A Directorate of the U.S. Total Army Personnel Command**

**EDGAR M. JOHNSON  
Director**

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Research accomplished under contract  
for the Department of the Army

Human Resources Research Organization

Technical review by

Judith E. Brooks

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# **CONTRACT FOR MANPOWER AND PERSONNEL RESEARCH AND STUDIES II (COMPRS-II) ANNUAL REPORT – YEAR TWO**

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## **Contract for Manpower and Personnel Research and Studies II (COMPRS-II) Annual Report-Year Two**

### **Introduction**

This report documents the first two years of a 5-year (1 base year and 4 option years) project to provide the U.S. Army Research Institute (ARI) non-personal, short- and medium-term scientific and technical support services in the solution of problems related to manpower and personnel. The program is referred to as the Contract for Manpower and Personnel Research and Studies II (COMPRS-II). HumRRO's primary responsibilities are to administer COMPRS-II for ARI under firm fixed-priced contracts by managing three inter-related tasks: (a) managing the COMPRS program in accordance with established operating procedures; (b) receiving and processing individual Statements of Tasks from ARI; and (c) managing, reporting progress on, and documenting completion of delivery orders.

There are three programs under COMPRS-II. They are summarized below and are described in detail in Appendix A:

- **Quick Reaction (QR) Program** - Intended to provide ARI responsive, short-term research or studies and analysis dealing with manpower and personnel issues for which ARI in-house capability is not available. Each of the QR Program delivery orders (DOs) shall be completed within a period of time specified in the DO, with the maximum allowable completion normally being within 12 months of the date of the DO.
- **Attitude and Opinion Survey (AOS) Program** - Intended to give ARI the ability to conduct surveys to provide information for accession and force management decision-making. Each of the AOS Program DOs shall be completed within a period of time specified in the DO, with the maximum allowable completion normally being within 12 months of the date of the DO or 18 months if OMB approval is required.
- **Medium-Term (MT) Program** - Intended to give ARI the ability to conduct a limited number of research efforts or studies and analyses whose duration would not normally exceed 24 months after the contractor receives the DO.

### **Summary of Activities**

During the first year of the contract, 13 DOs were initiated, to include DO# 0001 which provides for the overall management of COMPRS-II. The remaining 12 DOs were divided among the three program areas as follows: QR Program, 10 DOs; AOS Program, 1 DO; and MT Program, 1 DO. In the second year of the contract, ten more DOs were initiated, including DO #0016 which continues the overall management of the contract vehicle. Of the remaining DOs, five were QR, 1 was AOS, and 3 were MT. Table 1 summarizes DO activity for the first two contract years. Table 2 summarizes the total DO award amounts associated with each program in each year.

**Table 1. Summary of Delivery Order Activity**

	Year 1	Year 2
Number DOs initiated	13	10
Contract Administration	1	1
Quick Reaction	10	5
Attitude/Opinion Survey	1	1
Medium Term	1	3
Number active DOs as of August 9, 2000	N/A	10

**Table 2. Summary of Program Costs**

	Year 1	Year 2
Contract Administration	\$ 26,010	\$ 27,006
Quick Reaction	\$ 1,978,345	\$ 1,053,316
Attitude/Opinion Survey	\$ 87,603	\$ 1,466,501
Medium Term	\$ 306,468	\$ 2,465,080
Total	\$ 2,398,426	\$ 5,011,903

Summaries for each DO initiated during the first year of the contract follow. Each summary provides the following information:

- The DO number and title.
- The program area.
- The DO contracting officer's representative (DO-COR), assistant DO-COR, if one is assigned, and the contractor's project director.
- The DO status (either ongoing or completed), to include the dates.
- The project background.

- The objectives of the project.
- The key deliverables of the DO.
- Findings/outcomes for completed DOs.
- Report citations for completed DOs.

These summaries are not intended to provide significant detail about each DO; that information can be provided by the DO-COR upon request. The summaries are intended to give a very brief overview of each effort as well as to provide a snapshot of the contract's activities.



<b>DO# 0001</b>	<b>Title:</b> Year 1 Contract Administration
<b>Program Area</b> QR _____ AOS _____ MT _____	<b>DO-COR:</b> Dr. Judith Brooks <b>DO-ACOR:</b> <b>Project Director:</b> Dr. Deirdre Knapp
<b>Status:</b> Completed (August 20, 1998-November 19, 1999)	
<b>DO Summary</b>	
<p><b>Background:</b> Providing information on manpower and personnel issues to Army decision-and policy-makers is often a complex, dynamic, multi-stage, iterative process. The accuracy and timeliness of information provided to decision-makers are of paramount importance in the quality of decisions and policies. Over the next decade, the U.S. Army will experience an increasing requirement to bring individuals into the Army who are trainable in a wide variety of skill areas. To meet and maintain its high quality manpower needs of the 1990s, the Army will have to develop and implement programs that allow it to locate, assess, assign, and use human resources more efficiently and effectively than it ever has before. As new Army policies are being developed to enhance the Army's ability to man the force, the Army needs programs of research and studies that will provide a quick response mechanism to gather and analyze data on the expected or actual short-term effectiveness of those policies.</p> <p>Scientific and technical support services are being used that lead to the development and implementation of programs of research and studies on the expected or actual effectiveness of Manpower, Personnel, and Training (MPT) programs. These efforts are part of ARI's MPT program to man the force by conducting research and studies to improve the Army's ability to recruit, identify, assess, classify, assign, lead, train, and maintain the personnel required for the Army</p>	
<p><b>Project Objectives:</b> The objectives of this delivery order are to administer the Contract for Manpower and Personnel Research and Studies II (COMPRS-II) for ARI under firm fixed-priced contracts by performing three inter-related tasks: (a) managing the COMPRS program in accordance with established operating procedures; (b) receiving and processing individual Statements of Tasks from ARI; and (c) managing, reporting progress on, and documenting completion of delivery orders.</p>	
<p><b>Key Deliverables:</b> The following Delivery Orders were issued during Year 1:</p> <ul style="list-style-type: none"> <li>• DO 0001 Year 1 Contract Administration</li> <li>• DO 0002 Soldier Characteristics for the 21<sup>st</sup> Century: Phase II: Execution</li> <li>• DO 0003 Transition and Training for the Total Army Transition Division Contract Quality Assurance Program</li> <li>• DO 0004 Summary Report on Retention and Reacquisition of Knowledge and Skills</li> <li>• DO 0005 Update LROC/SOC Database and Construct a SOC Longitudinal Database</li> <li>• DO 0006 Initial Data Collection and Preliminary Analyses for Recruiting and Training Excellence (1<sup>st</sup> Rate)</li> <li>• DO 0007 Pre-Implementation Research on the Assessment of Individual Motivation (AIM): Data Analysis</li> <li>• DO 0008 Update of the U.S. Army Research Institute's Officer Personnel Research Data Bases for 1997 and 1998</li> <li>• DO 0009 Training Base Attrition Study – I</li> <li>• DO 0010 Task Knowledge Commonality Model (TKCAM) Application for MOS 11B, MOS 11H, and MOS 11M</li> <li>• DO 0011 Preparation of ARI Special Report on the Enlisted Personnel Allocation System (EPAS)</li> <li>• DO 0012 Data Collection Support for TRADOC-99-CEP-0101, Manned and Unmanned Aerial Platform Operations on the Digitized Battlefield (Air Maneuver Recon Teams)</li> <li>• DO 0013 Automated Data Collection System Modification and Development</li> </ul>	
<b>Findings/Outcomes:</b> n/a	
<p><b>Report Citations:</b></p> <p>Human Resources Research Organization. (1999). <i>COMPRS-II Year 1 – Standard Operating Procedures (SOP)</i> (Study Note 99-01). Alexandria, VA: U.S. Army Research Institute for the Behavioral and Social Sciences.</p> <p>Human Resources Research Organization (2000). <i>Contract for Manpower and Personnel Research and Studies II (COMPRS-II) Annual Report – Year 1</i> (ARI Research Note 2000-03). Alexandria, VA: U.S. Army Research Institute for the Behavioral and Social Sciences.</p>	

<b>DO# 0002</b>	<b>Title:</b> Soldier Characteristics for the 21 <sup>st</sup> Century: Phase II: Execution
<b>Program Area</b> QR <u>  X  </u> AOS <u>     </u> MT <u>     </u>	<b>DO-COR:</b> Dr. Michael Rumsey <b>DO-ACOR:</b> <b>Project Director:</b> Dr. Laura Ford
<b>Status:</b> Completed (September 13, 1998 – September 30, 1999)	
<b>DO Summary</b>	
<p><b>Background:</b> On 21 March 1997, MG Arthur T. Dean, Director of Military Personnel Management, Deputy Chief of Staff for Personnel, requested that ARI “immediately undertake a ‘quick study’ to determine the desired characteristics, qualities and aptitudes for the enlistee of the 21<sup>st</sup> century.” ARI responded with a two-part program, known as Soldier21. The first part, involving a review and summary of available information supplemented by a “target of opportunity” data collection, was completed and reported to MG Dean in January 1998. The second part was a more comprehensive effort involving the collection of new data. In May 1998, a contract effort was initiated to develop the methodology for this second part and to examine how the execution of this methodology and the execution of a related project, 21<sup>st</sup> Century NCOs (NCO21), could be merged for optimum efficiency.</p> <p>This study addressed two separate issues for the future Army: determining the most important knowledges, skills, and attributes (KSAs) for soldier selection (Soldier21) and identifying the most important KSAs for promotion to and within the noncommissioned officer (NCO) ranks (NCO21). The future Army eras that were explored were Army XXI (2000-2010) and the Army After 2010 (2010-2025). The Soldier21 study was an attempt to anticipate changes that should be considered for the Army selection and classification systems so as to select enlisted applicants who can better meet the task demands of the Army in the 21<sup>st</sup> century. The NCO portion of the project examined the battlefield of the future and how it will require NCOs who can train forces to operate effectively in digital environments with increased mission diversity, fewer soldiers, and numerous organizational and social changes. The NCO promotion system for the 21<sup>st</sup> century will need new measurement procedures to evaluate the full scope of performance needed to successfully meet future job requirements. To do so, jobs, units, and missions that are indicative of future conditions were examined and analyzed in order to outline the KSAs that could be utilized in a future performance-based promotion system. In other words, this project explored the factors that will affect jobs in the future. In turn, the KSAs that will be needed to succeed in the Army of the future were identified. Work on the continuation of the NCO21 portion of this research program has continued under Delivery Order #15.</p>	
<p><b>Project Objectives:</b> The objectives for this delivery order were to identify soldier requirements in two future Army eras in terms of (a) the required characteristics to effectively perform the job of a first term enlisted soldier, and (b) the individual attributes to effectively perform at three levels of NCO jobs – Junior NCOs (Corporal E4-E5), Mid-level NCOs (E6-E7), and Senior NCOs (E8-E9). Another objective was to identify potential alternative measures for the attributes identified as critical in the 21<sup>st</sup> century Army.</p>	
<p><b>Key Deliverables:</b> Key deliverables for this effort consisted of (a) a summary of future conditions relevant to Army jobs, (b) a summary of forecasted job demands, and (c) a final technical report.</p>	
<p><b>Findings/Outcomes:</b> The KSAs found to be potentially relevant for future selection (first tour soldiers) and promotion (NCOs) purposes were identified for five target groups: (1) For AXXI first tour soldiers the four most important KSAs were General Cognitive Aptitude, Conscientiousness/Dependability, Reading Skill, and Working Memory; (2) For AXXI Junior NCOs the four most important KSAs were Conscientiousness/Dependability, MOS/Occupation-Specific Knowledge and Skill, General Cognitive Aptitude, and Motivating and Leading Others; (3) For AXXI Mid-level NCOs the four most important KSAs were Judgment and Decision Making; General Cognitive Aptitude; Directing, Monitoring and Supervising Others; and Motivating and Leading Others; (4) For AXXI Senior NCOs the four most important KSAs were General Cognitive Aptitude, Motivating and Leading Others, Judgment and Decision Making, and Concern for Soldier Quality of Life; (5) For AA2010 Battle Force NCOs the three most important KSAs were Judgment and Decision Making, General Cognitive Aptitude, and Knowledge of Battlefield Function Integration.</p> <p>One difference between KSAs for selection and KSAs for NCO promotion is that additional KSA information is potentially available for promotion decisions. That is, various aspects of an individual’s current and past performance could be assessed and serve as predictors of future performance.</p>	
<p><b>Report Citations:</b> Ford, L. A., Campbell, R. C., Campbell, J. P., Knapp, D. J., &amp; Walker, C. B. (2000). <i>21st Century Soldiers and Noncommissioned Officers: Critical Predictors of Performance</i> (ARI Technical Report 1102). Alexandria, VA: U.S. Army Research Institute for the Behavioral and Social Sciences.</p>	

<b>DO# 0003</b>	<b>Title:</b> Transition and Training for the Total Army Transition Division Contract Quality Assurance Program
<b>Program Area</b> QR ____ AOS ____ MT <u>  X  </u>	<b>DO-COR:</b> Ms. Susan Harvey, ASA (M & RA [HR XXI]) <b>DO-ACOR:</b> Ms. Naomi Lynch, ASA (M & RA [HR XXI]) <b>Project Director:</b> Mr. Eric Wetzel
<b>Status:</b> Completed (September 11, 1998 – June 30, 2000)	
<b>DO Summary</b>	
<p><b>Background:</b> HumRRO has a long history with the Transition Acquisition Branch (TAB) of the Total Army Transition Division (TATD) which includes support of quality assurance (QA) program and management information system (MIS) development. These two programs are critical to an organization such as the TAB, which monitors a five billion dollar indefinite quantities contract (IQC) providing human resources support services to the Army and other federal government agencies. On 23 February 1999, TAB was transferred from PERSCOM to the Assistant Secretary of the Army for Manpower and Reserve Affairs (ASA [M&amp;RA]). The organization formerly known as TAB is now the Human Resources XXI office (HR XXI). Under ASA (M&amp;RA), the market and potential uses of the IQC have expanded and the possibility of the HR XXI office operating under a cost reimbursable format was being considered. These organizational and potential functional changes necessitated modifications to both the QA program and MIS, along with the development of a business and marketing plan for HR XXI's use in a cost reimbursable environment.</p>	
<p><b>Project Objectives:</b> The objectives of this delivery order were to provide HR XXI with the necessary support to make a smooth transition to their new organizational structure, and to lay the ground work for their expanded mission while updating/finalizing the QA program and MIS developed under a previous COMPRS-I delivery order.</p>	
<p><b>Key Deliverables:</b> The final deliverables for this project included a revised QA program, as well as MIS and business and marketing plans for the re-focused organization.</p>	
<p><b>Findings/Outcomes:</b> A 2-volume final report updating the previously developed QA and MIS program documentation was delivered directly to the COR on September 24, 1999. These volumes were deemed "Procurement Sensitive – For Official Use Only" by the COR and marked accordingly. The Business and Marketing Plans were delivered directly to the COR by HumRRO consultants and subcontractors.</p>	
<p><b>Report Citations:</b> Due to the sensitive nature of these documents, no report citations were made.</p>	

<b>DO#</b> 0004	<b>Title:</b> Summary Report on Retention and Reacquisition of Knowledge and Skills
<b>Program Area</b> QR <u>  X  </u> AOS <u>     </u> MT <u>     </u>	<b>DO-COR:</b> Dr. Robert Wisher <b>DO-ACOR:</b> <b>Project Director:</b> Dr. Deirdre Knapp (with Dr. John Ellis of K. Ellis Human Resources Services & Consulting)
<b>Status:</b> Completed (September 16, 1998 – July 30, 1999)	
<b>DO Summary</b>	
<b>Background:</b> ARI required assistance from an expert in the field of learning and memory to prepare a summary review of research on skill retention and reacquisition. The summary review, approximately 20 pages in length, was to cover research done by ARI and other military laboratories in remembering skills taught in the classroom and field for periods of up to several years.	
<b>Project Objectives:</b> The objective of this effort was to provide a non-technical document with supporting photographs and graphic material to inform the military reader of the importance and value of research on skill retention and reacquisition.	
<b>Key Deliverables:</b> The key deliverable was a final report	
<b>Findings/Outcomes:</b> The report has been completed and published as an ARI Special Report.	
<b>Report Citations:</b> Wisher, R.A., Sabol, M.A., & Ellis, J.A. (1999). <i>Staying Sharp: Retention of Military Knowledge and Skills</i> (ARI Special Report 39). Alexandria, VA: U.S. Army Research Institute for the Behavioral and Social Sciences.	

<b>DO# 0005</b>	<b>Title:</b> Update LROC/SOC Database and Construct a SOC Longitudinal Database
<b>Program Area</b> QR ____ AOS __X_ MT ____	<b>DO-COR:</b> Ms. June T. Jones <b>DO-ACOR:</b> <b>Project Director:</b> Dr. Gina Medsker
<b>Status:</b> Completed (September 25, 1998 – August 31, 1999)	
<b>DO Summary</b>	
<b>Background:</b> ARI has been conducting surveys of officer attitudes for several years, including the Longitudinal Research on Officer Careers (LROC) surveys in 1988, 1989, 1990, and 1992, and the Survey of Officer Careers (SOC) in 1996 and 1998. The purpose of this effort was to produce both a Longitudinal Database and a Trend Database for ARI. The databases will be used to continue monitoring Army officers on issues of concern to the Army and the officer corps. Current SOC results, in conjunction with previous SOC and LROC results, will help the Army understand what happens to officers during their careers and the types and extent of impacts that events, behaviors, and attitudes/opinions have on officers' career plans. Results of the 1998 SOC will also help the Army track officer reactions to the new Officer Personnel Management System XXI (OPMS XXI).	
<b>Project Objectives:</b> The objectives of this project were to provide (a) a fully documented SOC Longitudinal Database that includes respondents who have data for both 1996 and 1998 SOC surveys, (b) a SOC Trend Database which adds the 1998 SOC Cross-Sectional Database to the existing LROC/SOC database, and (c) a set of charts displaying the results for both the SOC Longitudinal and Trend Databases.	
<b>Key Deliverables:</b> Key deliverables include an edited 1998 SOC raw data file and final editing program, the 1996-98 SOC Longitudinal Database and codebook, the SOC-LROC Trend Database and codebook, and charts for all items that appeared in both the 1996 and 1998 SOC based on the 1996-1998 Longitudinal Database.	
<b>Findings/Outcomes:</b> Electronic data sets, codebooks, and briefing charts were provided to ARI in accordance with the contract deliverable requirements.	
<b>Report Citations:</b> n/a	

<b>DO# 0006</b>	<b>Title:</b> Initial Data Collection and Preliminary Analyses for Recruiting and Training Excellence (1 <sup>st</sup> Rate)
<b>Program Area</b> QR <u>  X  </u> AOS <u>     </u> MT <u>     </u>	<b>DO-COR:</b> Dr. Trueman Tremble <b>DO-ACOR:</b> <b>Project Director:</b> Dr. Bill Strickland
<b>Status:</b> Completed (September 28, 1998 – December 31, 1999)	
<b>DO Summary</b>	
<p><b>Background:</b> In 1996, the Office of the Assistant Secretary of the Army (Manpower and Reserve Affairs; ASA M&amp;RA) asked ARI to draft a broad-based proposal for carrying out a five- to six-year comprehensive, integrated research program examining the multiple causes of first-term Army enlisted attrition. This proposal suggests that variables influencing attrition include personal variables (e.g., expectations, values, and background), organizational variables (e.g., culture and climate within the Army), and extra-organizational variables (e.g., attitudes of significant others, opportunities for civilian employment). When considered in combination, these variables determine the individual's "fit" within the organization and the likelihood that he or she will be successful in the Army.</p> <p>In support of this long-term effort, ARI developed a multi-phased project. Phase I of the project began in August 1997 and was completed in January 1998. The objective for that initial phase was to develop and assess a prototype database for tracking first-term enlisted personnel attrition. The results from Phase I established the methodology for developing comprehensive attrition databases for subsequent phases.</p> <p>Phase II of the project began in June 1998 and ended in October 1999. Phase II had three primary objectives: (a) design and plan the overall five- to six-year attrition effort which incorporates both longitudinal and concurrent designs; (b) develop comprehensive sampling plans for both the longitudinal and concurrent designs; and (c) develop, field test, and gain approval for appropriate surveys and other measures in preparation for the data collection phases.</p> <p>This delivery order constituted Phase III of the attrition program. The objectives of Phase III were to execute the initial data collection phase of the study and to conduct preliminary analyses of the data. Data from a subset of fiscal year 1999 soldiers entering training served as a longitudinal cohort to be followed through their first-term of enlistment. Concurrent samples of soldiers in various stages of their first-term were collected and used for comparison.</p>	
<p><b>Project Objectives:</b> There were two objectives of this effort:</p> <ol style="list-style-type: none"> <li>1. To execute the initial data collection phase of the attrition research program using the research measures, data collection plan, and sampling plan developed in Phase II of the project.</li> <li>2. To conduct preliminary analyses of the data collected during this phase.</li> </ol>	
<b>Key Deliverables:</b> Technical Report	
<b>Findings/Outcomes:</b> Administration of the Soldier Reception Survey was completed in August, while the End of Training and Exit Surveys were completed in December. Preliminary analyses of scales within the surveys indicate that they will likely be useful for subsequent data modeling efforts.	
<b>Report Citations:</b> Sipes, D.E., & Sadacca, R. (2000). <i>Initial data collection and preliminary analyses for research on first-term soldier attrition and management (Project First Term)</i> (ARI Research Note 2000-10). Alexandria, VA: U.S. Army Research Institute for the Behavioral and Social Sciences.	

<b>DO# 0007</b>	<b>Title:</b> Pre-Implementation Research on the Assessment of Individual Motivation (AIM): Data Analysis
<b>Program Area</b> QR <u>  X  </u> AOS <u>     </u> MT <u>     </u>	<b>DO-COR:</b> Dr. Mark Young <b>DO-ACOR:</b> Dr. Michael Rumsey <b>Project Director:</b> Dr. Brian Waters
<b>Status:</b> Completed (September 28, 1998 – November 30, 1999)	
<b>DO Summary</b>	
<p><b>Background:</b> Over the past decade, there has been a resurgence of interest in using personality (or temperament) assessments for personnel decisions. The military has been no exception. The Assessment of Background and Life Experiences (ABLE) was designed to assess six personality constructs that were identified as having a potential to be predictive of job-related criteria. Research indicated that, while the ABLE had predictive validity for certain aspects of job performance and for first-term attrition, it was also susceptible to the effects of faking and coaching. Also, while evidence of the predictive validity of ABLE was found for various criteria in the standard instruction condition, the validity estimates were near zero for the same criteria in the faking and coaching conditions. At least in part on the basis of these results, the ABLE was not operationally implemented in the Army.</p> <p>ARI developed the Assessment of Individual Motivation (AIM) in an effort to build an assessment tool that would provide scores for the constructs measured by ABLE, but in a way that was resistant to the effects of faking and coaching. Preliminary research using the AIM indicated that the instrument was predictive of first-term attrition and was less susceptible to the effects of faking and coaching than the ABLE. These positive preliminary findings piqued the Army's interest in using the AIM as a pre-enlistment screen for attrition, and a program of research was initiated to (a) determine whether the use of AIM for pre-enlistment screening would be viable for the Army and (b) remove obstacles to its implementation.</p> <p>This delivery order extended the AIM development work begun under Delivery Order # 75 of COMPRS-I.</p>	
<p><b>Project Objectives:</b> The project objectives were as follows:</p> <ol style="list-style-type: none"> <li>1. Create the database needed for carrying out AIM Phase I research.</li> <li>2. Determine the validity of the existing AIM against 3-month attrition.</li> <li>3. Refine and evaluate two initial AIM alternate forms.</li> <li>4. Create and evaluate revised AIM alternate forms.</li> <li>5. Conduct research to establish testing policies for those applicants who have high scores on the faking scale or who score below the AIM cut score.</li> <li>6. Assess the potential for adverse impact in the AIM.</li> </ol>	
<p><b>Key Deliverables:</b> Key project deliverables were:</p> <ol style="list-style-type: none"> <li>1. SAS dataset and code book</li> <li>2. Alternate AIM forms</li> <li>3. Plans for faking policy research and for policy research on applicants who fail AIM</li> <li>4. Final report</li> </ol>	
<b>Findings/Outcomes:</b> The Army implemented the AIM as a screen for Category II applicants in FY 2000.	
<p><b>Report Citations:</b></p> <p>Heggestad, E. D., Young, M. C., Strickland, W. G., &amp; Rumsey, M. G. (1999). <i>The Assessment of Individual Motivation: Evaluation of validity and development of alternate forms</i> (FR-WATSD-99-66). Alexandria, VA: Human Resources Research Organization.</p> <p>Heggestad, E.D, Lightfoot, M.A., &amp; Waters, B.K. (1999). <i>Pre-implementation research on the assessment of individual motivation (AIM). Phase I: Item development</i> (HumRRO Final Report FR-WATSD-99-22). Alexandria, VA: Human Resources Research Organization.</p> <p>Young, M.C. Heggestad, E.D., &amp; Nason, E. (1999, September). Assessment of Individual Motivation (AIM) pre-implementation research and implementation plans. In L. Looper, Chair, <i>Screening, selection, attrition, and retention</i>. Symposium conducted at the meeting of the Military Operations Research Society, Alexandria, VA.</p>	



<b>DO# 0008</b>	<b>Title:</b> Update of U.S. Army Research Institute's Officer Personnel Research Data Bases for 1997 and 1998
<b>Program Area</b> QR <u>  X  </u> AOS <u>     </u> MT <u>     </u>	<b>DO-COR :</b> Dr. Peter M. Greenston <b>DO-ACOR:</b> <b>Project Director:</b> Ms. Lori Ramsey (Fu Associates)
<b>Status:</b> Completed (September 28, 1998 - September 15 1999)	
<b>DO Summary</b>	
<p><b>Background:</b> ARI's Selection and Assignment Research Unit (SARU) required an update to a group of U.S. Army personnel databases that could be used as a ready source of career history information for analysis of career path issues such as attrition, retention, and promotion. In addition, the databases could serve as a complement to survey data collected to study leader development, organizational commitment, and other issues. In order to satisfy these research requirements, it was necessary to collect, process, and add current personnel and training data to the Officer Longitudinal Research Data Base (OLRDB) and the Officer Educational Testing Data Base (OSETDB). The OLRDB is constructed primarily of officer personnel data from the Officer Master File (OMF) and separation history from the Separation Officer Master File (SOMF). The OSETDB contains officer personnel data from the OMF and SOMF and academic aptitude measures in the form of standardized scores collected from the Educational Testing Service and the American College Testing Program.</p>	
<p><b>Project Objectives:</b> The objective of this project was to collect annual source data files for 1997 and 1998 and to update the OLRDB and the OSETDB with officer personnel data maintained by Personnel Command (PERSCOM) and the Defense Manpower Data Center (DMDC). In addition, modifications were made to the existing update process to develop procedures that are Y2K compliant.</p>	
<p><b>Key Deliverables:</b> Key project deliverables were (a) a 1997 and 1998 version of the OLRDB Longitudinal and Core data sets on computer tape, (b) a 1997 and 1998 version of the OSETDB on computer tape, (c) a final study report for the 1997 and 1998 OLRDB and OSETDB data sets, and (d) a CD-ROM copy of the OLRDB and OSETDB Longitudinal data sets.</p>	
<p><b>Findings/Outcomes:</b> In addition to delivery of the actual data sets, the final report produced in this project describes the procedures performed to add 1997 and 1998 personnel data to the Longitudinal and Core OLRDB data sets.</p>	
<p><b>Report Citations:</b> Ramsey, L.J., &amp; Meade, K.F. (1999). <i>Update of U.S. Army Research Institute's Officer Personnel Research Data Bases for 1997 and 1998</i>. FU Associates/HumRRO contract final report.</p>	



<b>DO# 0009</b>	<b>Title:</b> Training Base Attrition Study – I
<b>Program Area</b> QR <u>  X  </u> AOS <u>     </u> MT <u>     </u>	<b>DO-COR:</b> Dr. Trueman Tremble <b>DO-ACOR:</b> <b>Project Director:</b> Dr. Bill Strickland
<b>Status:</b> Ongoing (February 11, 1999 – October 31, 2000)	
<b>DO Summary</b>	
<p><b>Background:</b> In November 1998, the Chief of Staff of the Army (CSA) directed the Deputy Chief of Staff for Personnel (DCSPER) to conduct a study to determine why soldiers separate from the Army while at the initial entry training (IET) base. The directive called for study of the soldiers who leave service in calendar year (CY) 1999.</p> <p>When ARI received this tasking, it had already initiated an effort sponsored by the Assistant Secretary of the Army, Manpower and Reserve Affairs (ASA (M&amp;RA)) to study first-term attrition issues known as "First Term Recruiting and Training Excellence" (or First Rate, see DO#6). The objective of First Rate is to determine the causes of attrition during the first term of enlistment. Central to achievement of First Rate's objective is the collection of data on a cohort of first-term soldiers over the course of the initial enlistment period, beginning with entry at Army reception battalions and ending with exit from service or term completion.</p> <p>The plans underway for First Rate provide the start for a timely response to the CSA tasking. The types of data obtained through the established First Rate procedures, however, reflect only part of the attrition equation. That is, they represent reasons and explanatory factors for attrition as perceived by the soldiers, especially soldiers who are separating. The other part of the equation reflects the views of the organization. Response to the CSA request will include assembly of official views on the soldiers who leave service. Linking soldiers' own views with official views may help clarify reasons for attrition and suggest strategies for controlling attrition rates.</p> <p>The purpose of this effort is to obtain the information for a focused and timely response to the CSA tasking. The outlined work adds to the sample of incoming soldiers who are studied while in training base in CY99. In addition, it undertakes work envisioned but not yet initiated for First Rate so that the expected products are used to respond to the CSA request about IET attrition. Finally, it calls for collection and use of information not originally planned for First Rate – specifically, personnel data from official records.</p>	
<b>Project Objectives:</b> The objective of this delivery order is to determine why soldiers leave the Army while in the entry training base.	
<b>Key Deliverables:</b> Key project deliverables consist of: <ol style="list-style-type: none"> <li>1. Two expanded progress reports.</li> <li>2. Briefing materials supporting the expanded progress reports, for ARI use in presenting updates to the DCSPER.</li> <li>3. A final Technical Report.</li> <li>4. Briefing materials describing the study's findings, suitable for presentation to the Chief of Staff.</li> </ol>	
<b>Findings/Outcomes:</b>	
<b>Report Citations:</b>	

<b>DO#</b> 0010	<b>Title:</b> Task Knowledge Commonality Model (TKCAM) Application for MOS 11B, MOS 11H, and MOS 11M
<b>Program Area</b> QR <u>  X  </u> AOS <u>     </u> MT <u>     </u>	<b>DO-COR:</b> Mr. Bill Badey <b>DO-ACOR:</b> <b>Project Director:</b> Dr. Bill Strickland (with Mr. Alan Akman of Akman Associates)
<b>Status:</b> Completed (February 18, 1999 – September 30, 1999)	
<b>DO Summary</b>	
<p><b>Background:</b> Occupational mergers or shred-outs require updates to officer and enlisted individual and advanced technical task training. AR 611-1, Military Occupational Classification Structure and Implementation (Sep 97), requires documentation of occupational restructures as well as updates to job descriptions contained in various Army Regulations and Pamphlets. The Task Knowledge Commonality Model (TKCAM) is a tool designed specifically to allow users to analyze the feasibility of occupational mergers or shred-outs, to define new occupational structures, and to assist in the initial identification of tasks which can be considered critical to individual and unit survival on the battlefield.</p> <p>The Commandant, United States Army Infantry School (USAIS), Fort Benning, GA, is considering the merger of MOS 11B (Infantryman), MOS 11H (Heavy Antiarmor Weapons Infantryman), and MOS 11M (Fighting Vehicle Infantryman) to improve the efficiency of field combat operations. He requested ARI's assistance in applying the TKCAM methodology to help determine the advisability of carrying out the proposed merger.</p>	
<p><b>Project Objectives:</b> The project had three objectives:</p> <ol style="list-style-type: none"> <li>1. Present a comprehensive course of instruction on TKCAM principles and practices at the USAIS.</li> <li>2. Validate TKCAM user findings made by the USAIS.</li> <li>3. Collect and provide lessons learned and proposed changes to improve the TKCAM USER'S MANUAL design and processes.</li> </ol>	
<p><b>Key Deliverables:</b> Key deliverables were as follows:</p> <ol style="list-style-type: none"> <li>1. Briefing to the Office of Infantry Proponency</li> <li>2. TKCAM Summary Report</li> <li>3. Observations and Lessons Learned Letter Report</li> </ol>	
<p><b>Findings/Outcomes:</b> As noted by MG Ernst, CG USAIC, in a Certificate of Appreciation, "Based upon . . .the Task Knowledges Commonality Analysis Method, the Infantry is now in a position to speak with facts on the question of MOS restructure feasibility."</p>	
<b>Report Citations:</b> n/a	

<b>DO# 0011</b>	<b>Title:</b> Preparation of ARI Special Report on the Enlisted Personnel Allocation System (EPAS)
<b>Program Area</b> QR <u>  X  </u> AOS <u>     </u> MT <u>     </u>	<b>DO-COR:</b> Dr. Peter Greenston <b>DO-ACOR:</b> <b>Project Director:</b> Dr. Mary Ann Lightfoot
<b>Status:</b> Completed (April 13, 1998 – April 30, 1999)	
<b>DO Summary</b>	
<b>Background:</b> ARI required a description of EPAS and how it fits within Army personnel classification research, development, and operational systems. The special report should be for an audience of Army managers—military and civilian, with diverse backgrounds. The “story” of EPAS includes what it is, how it works, what it will do for the Army when it is operational, and how it can be enhanced in the near future to provide even greater utility and efficiency. EPAS is an algorithm, implemented by linear programming software, which optimizes the Army’s enlisted personnel classification system, while accounting for realistic constraints. EPAS was designed, developed, and tested by ARI over 15 years. It is currently being installed in the Army’s operational recruit selection and classification mainframe software called REQUEST.	
<b>Project Objectives:</b> The objective of this project was to prepare an ARI Special Report that describes EPAS development and its role in improving classification in the Army. The audience for this special report is Army management.	
<b>Key Deliverables:</b> The key deliverable is an ARI Special Report.	
<b>Findings/Outcomes:</b> n/a	
<b>Report Citations:</b> Lightfoot, M.A., & Ramsberger, P.F. (2000). <i>Matching Recruits to Jobs: The Enlisted Personnel Allocation System (EPAS)</i> (ARI Special Report 41). Alexandria, VA: U.S. Army Research Institute for the Behavioral and Social Sciences.	

<b>DO# 0012</b>	<b>Title:</b> Data Collection Support for TRADOC-99-CEP-0101, Manned and Unmanned Aerial Platform Operations on the Digitized Battlefield (Air Maneuver Recon Teams)
<b>Program Area</b> QR <u>  X  </u> AOS <u>     </u> MT <u>     </u>	<b>DO-COR:</b> Dr. William Howse <b>DO-ACOR:</b> <b>Project Director:</b> Dr. Deirdre J. Knapp (with Mr. John Woods of Carmel Applied Technologies, Incorporated)
<b>Status:</b> Completed (August 5, 1999 – February 28, 2000)	
<b>DO Summary</b>	
<p><b>Background:</b> The Air Maneuver Battle Lab (AMBL) is conducting TRADOC-99-CEP-0101, Manned and Unmanned Aerial Platform Operations on the Digitized Battlefield. It is the third in a series of investigations on this subject under the Training and Doctrine Command (TRADOC) Concept Experimentation Program. This effort is commonly referred to as MUM-III. The ARI Rotary Wing Aviation Research Unit (ARI-RWARU) provided support for MUM-I (TRADOC-CEP-97-0101) and MUM-II (TRADOC-CEP-98-0104), and is providing support for MUM-III. Experimentation is being conducted by means of operation of interactive virtual simulations of manned and unmanned rotary wing aircraft in a Distributed Interactive Simulation (DIS) synthetic environment. Major simulation systems anticipated for use in MUM-III include the Advanced Tactical Combat Model (ATCOM), the Comanche Portable Cockpit (CPC), and the Rapid Prototyping Mission Simulator (RPMS). The effort explores the potential increases in operational effectiveness that can be gained through cooperative teaming of dissimilar systems to accomplish reconnaissance missions.</p> <p>Although most support for this effort is provided by ARI personnel, additional manpower was required to operate and monitor the automated data collection systems during the execution of simulation exercises and to perform data reduction functions during and after simulation exercises. It was imperative that data reduction be accurately performed during and at the close of each simulated mission and immediately following the data collection phase of the project.</p>	
<b>Project Objectives:</b> The objective of this delivery order was to ensure correct and complete collection of data from a real-time virtual simulation network and to perform data reduction processes as rapidly as possible.	
<b>Key Deliverables:</b> Key deliverables were a Summary data archive and Measures of Performance (MOPs)	
<b>Findings/Outcomes:</b> n/a	
<b>Report Citations:</b> n/a	

<b>DO#</b> 0013	<b>Title:</b> Automated Data Collection System Modification and Development
<b>Program Area</b> QR <u>  X  </u> AOS <u>     </u> MT <u>     </u>	<b>DO-COR:</b> Dr. William Howse <b>DO-ACOR:</b> <b>Project Director:</b> Dr. Deirdre J. Knapp (with Dr. David Skipper of Bevilacqua Research Corporation)
<b>Status:</b> Completed (August 5, 1999 – February 28, 2000)	
<b>DO Summary</b>	
<b>Background:</b> The U.S. Army Research Institute Rotary Wing Aviation Research Unit (ARI/RWARU) at Ft. Rucker Alabama has been tasked to support MUM III exercises at the Aviation Battle laboratory. This support includes the collection and analysis of human factors data related to soldier performance during the exercises. ARI plans to use the DCAT automated data collection software to help perform this task. The AEMoS software has been used in the past, however, and several of the capabilities of AEMoS must be integrated with the new DCAT software to allow comprehensive data collection and analysis capability.	
<b>Project Objectives:</b> The objective of this effort was to combine features of the AEMoS and DCAT data collection systems for use in support of the MUM-III exercises.	
<b>Key Deliverables:</b> Key deliverables were the software source and executable code.	
<b>Findings/Outcomes:</b> n/a	
<b>Report Citations:</b> n/a	

<b>DO# 0014</b>	<b>Title:</b> Automation of Army's Basic Skills Program
<b>Program Area</b> QR _____ AOS _____ MT <u>  X  </u>	<b>DO-COR:</b> Ms. Sylvia Lyles (PERSCOM) <b>DO-ACOR:</b> Ms. Dee Flynn <b>Project Director:</b> Dr. Laura Ford (HumRRO)
<b>Status:</b> Ongoing (September 28, 1999 – December 31, 2001)	
<b>DO Summary</b>	
<p><b>Background:</b> For soldiers in today's Army, skill in such basic subjects as reading and mathematics are as important as ever. The Army has paper-based, instructor-facilitated basic skills training programs known as Functional Academic Skills Training (FAST), but the programs are neither standardized nor automated. As a result, the training that is provided is not of consistent quality, and no programs are provided for soldiers who are away from their homestations because of deployments. Furthermore, there is no management information system (MIS) to provide reliable feedback on how the programs are being used.</p> <p>Consequently, the leadership of the Army has directed that the Army's basic skills program be automated, standardized, and deployed. The approach will be to automate the program by integrating commercial-off-the-shelf (COTS) software with Army-unique, "green" content from the current FAST curriculum.</p> <p><b>Project Objectives:</b> The overarching objective for this project is to recommend an effective and efficient computer-based instruction (CBI) package for basic skills and a suitable information management system. To achieve this objective we will:</p> <ul style="list-style-type: none"> <li>• Identify up to three basic skills COTS software packages that meet program specifications and conduct a controlled evaluation or pilot test.</li> <li>• Explore the possibility of incorporating Army-specific content into COTS basic skills packages.</li> <li>• Purchase and install requisite hardware and software at various Army locations for the pilot tests.</li> <li>• Recommend the most effective COTS package for Army basic skills training, based on pilot test results.</li> <li>• Recommend the most effective information management system for the Army basic skills program, based on pilot test results.</li> <li>• Evaluate the current, basic skills measurement instruments using archival data.</li> </ul> <p><b>Key Deliverables:</b> The key deliverables for this effort will be (a) a report on the criteria used to choose three different COTS for a formal evaluation, (b) a report on the Army-specific content that should be incorporated into the COTS basic skills program, (c) computer workstations and software for conduct of COTS evaluation, and (d) a final report on pilot test results.</p>	
<b>Findings/Outcomes:</b>	
<b>Report Citations:</b>	

<b>DO# 0015</b>	<b>Title:</b> NCO Characteristics for the 21 <sup>st</sup> Century: Assessment and Validation
<b>Program Area</b> QR _____ AOS _____ MT <u>  X  </u>	<b>DO-COR:</b> Dr. Michael G. Rumsey <b>DO-ACOR:</b> <b>Project Director:</b> Dr. Deirdre J. Knapp
<b>Status:</b> Ongoing (September 30, 1999 – September 20, 2002)	
<b>DO Summary</b>	
<p><b>Background:</b> The noncommissioned officer (NCO) corps must ensure that the U.S. Army remains trained and ready today and adapts to meet the challenges of the 21<sup>st</sup> century (GEN Reimer, Chief of Staff of the Army, 1996). These challenges include more complex technology, an increased diversity of missions, a downsized Army, and organizational and social changes. The battlefield of the future requires soldiers who can effectively operate in digitized environments and meet an increased diversity of missions.</p> <p>This effort addresses NCO promotion, a critical component of an effective personnel management system for the future NCO corps. The current promotion system does not fully assess an individual's potential to meet current job demands, much less those that will be required as we move further into the 21<sup>st</sup> century.</p> <p>This is the third phase of a three-phase effort undertaken by the U.S. Army Research Institute for the Behavioral and Social Sciences (ARI). The first phase developed a plan for execution of Phase II. The second phase involved the identification of a set of critical 21<sup>st</sup> century NCO knowledges, skills, and aptitudes (KSAs) for two time periods (2000-2010 and 2010-2025), based on a projected set of future job demands. In the third phase, predictor measures of these critical KSAs will be identified and validated against performance measures relevant to future NCO performance. Indicators linked to these measures of future success will provide the knowledge base and foundation for an improved NCO performance system.</p>	
<p><b>Project Objectives:</b> The purpose of this effort is to lay the knowledge base for a promotion system geared to the needs of the 21<sup>st</sup> century. More specifically, the objectives are to (a) develop and/or identify measures of the KSAs needed to perform effectively the NCO job in two separate time periods (2000-2010, 2010-2025), and for multiple NCO levels; (b) develop performance measures that will serve as criteria for the KSA measures identified or developed; and (c) validate the KSA measures against the performance measures.</p>	
<p><b>Key Deliverables:</b> Key project deliverables include KSA and criterion measures, including a report describing their development. There will be a final report that reports the methodology and findings associated with the validation of the KSA measures.</p>	
<b>Findings/Outcomes:</b>	
<b>Report Citations:</b>	

<b>DO# 0016</b>	<b>Title:</b> Year 2 Contract Administration
<b>Program Area</b> QR ____ AOS ____ MT ____	<b>DO-COR:</b> Dr. Judith Brooks <b>DO-ACOR:</b> <b>Project Director:</b> Dr. Deirdre Knapp
<b>Status:</b> Ongoing (October 5, 1999-November 4, 2000)	
<b>DO Summary</b>	
<p><b>Background:</b> Providing information on manpower and personnel issues to Army decision-and policy-makers is often a complex, dynamic, multi-stage, iterative process. The accuracy and timeliness of information provided to decision-makers are of paramount importance in the quality of decisions and policies. Over the next decade, the U.S. Army will experience an increasing requirement to bring individuals into the Army who are trainable in a wide variety of skill areas. To meet and maintain its high quality manpower needs of the new millenium, the Army will have to develop and implement programs that allow it to locate, assess, assign, and use human resources more efficiently and effectively than it ever has before. As new Army policies are being developed to enhance the Army's ability to man the force, the Army needs programs of research and studies that will provide a quick response mechanism to gather and analyze data on the expected or actual short-term effectiveness of those policies.</p> <p>Scientific and technical support services are being used that lead to the development and implementation of programs of research and studies on the expected or actual effectiveness of Manpower, Personnel, and Training (MPT) programs. These efforts are part of ARI's MPT program to man the force by conducting research and studies to improve the Army's ability to recruit, identify, assess, classify, assign, lead, train, and maintain the personnel required for the Army.</p>	
<p><b>Project Objectives:</b> The objectives of this delivery order are to administer the Contract for Manpower and Personnel Research and Studies II (COMPRS-II) for ARI under firm fixed-priced contracts by performing three inter-related tasks: (a) managing the COMPRS program in accordance with established operating procedures; (b) receiving and processing individual Statements of Tasks from ARI; and (c) managing, reporting progress on, and documenting completion of delivery orders.</p>	
<p><b>Key Deliverables:</b> The following Delivery Orders have been issued during Year 2:</p> <ul style="list-style-type: none"> <li>• DO 0014 Automation of Army's Basic Skills Program</li> <li>• DO 0015 NCO Characteristics for the 21<sup>st</sup> Century: Assessment and Validation</li> <li>• DO 0016 Year 2 Contract Administration</li> <li>• DO 0017 Impact of ACES on Soldier Retention and Performance: A Research Plan</li> <li>• DO 0018 Army Recruiting Market Segmentation Survey</li> <li>• DO 0019 Support for Evaluation of Basic Research Proposals</li> <li>• DO 0020 First Term Soldier Attrition and Management</li> <li>• DO 0021 MOS Consolidation for the Future Battlefield</li> <li>• DO 0022 Pilot Test of Spanish Language Entrance Screening Test: Phase I</li> <li>• DO 0023 Update of ARI's Officer Personnel Research Data Bases for 1999 and 2000</li> </ul>	
<b>Findings/Outcomes:</b>	
<p><b>Report Citations:</b> Human Resources Research Organization. (1999). <i>COMPRS-II Year 2 – Standard Operating Procedures (SOP)</i>. HumRRO contract report.</p>	



<b>DO#</b> 0017	<b>Title:</b> Impact of the Army Continuing Education System (ACES) on Soldier Retention and Performance: A Research Plan
<b>Program Area</b> QR <u>  X  </u> AOS <u>     </u> MT <u>     </u>	<b>DO-COR:</b> Dr. Mark Young <b>DO-ACOR:</b> Dr. Trueman Tremble <b>Project Director:</b> Dr. Paul J. Sticha
<b>Status:</b> Ongoing (January 12, 2000 – October 11, 2000)	
<b>DO Summary</b>	
<p><b>Background:</b> The Army established the Army Continuing Education System (ACES) to promote lifelong learning opportunities for its members with the hope that these educational activities will support combat readiness and quality of life, and will enhance the competitive edge of the force. ACES includes several programs to meet the educational needs of soldiers and to help soldiers to apply the skills learned in the Army to obtain academic credentials needed for their later civilian life. These programs include (a) The American Council of Education Military Evaluations Program, (b) the Army Personnel Testing Program, (c) the Army Tuition Assistance Program, (d) the Functional Academic Skills Training Program, (e) the High School Completion Program, (f) the Servicemembers Opportunity Colleges Army Degree Program, and (g) the Army/American Council on Education Registry Transcript System. Soldier participation in ACES programs is coordinated by education counselors located at installation Army Education Centers.</p> <p>The Education Division of the U.S. Army Total Personnel Command (PERSCOM) requested that the U.S. Army Research Institute (ARI) initiate a preliminary study to examine the relationship between in-service civilian education under the ACES program, and soldier retention and performance. ARI has agreed to initiate such a study. PERSCOM's Education Division, the sponsor of this effort, anticipates using the results of this research as a basis for documenting the value of the ACES program for (a) attracting and retaining soldiers and (b) supporting the Army's training, education, and leader development objectives.</p>	
<p><b>Project Objectives:</b> The project objectives are as follows:</p> <ol style="list-style-type: none"> <li>1. Develop a detailed research plan for evaluating those aspects of the ACES program for which an empirical evaluation is most relevant, viable, and cost effective.</li> <li>2. Develop a plan for creating the database needed for conducting the data analyses for the program evaluation</li> </ol>	
<p><b>Key Deliverables:</b> Key project deliverables are:</p> <ol style="list-style-type: none"> <li>1. Review of previous research conducted in the military and civilian sectors since 1980.</li> <li>2. Written comprehensive evaluation research plan.</li> <li>3. Written database development plan.</li> <li>4. Final report.</li> </ol>	
<b>Findings/Outcomes:</b>	
<b>Report Citations:</b>	

<b>DO#</b> 0018	<b>Title:</b> Army Recruiting Market Segmentation Survey
<b>Program Area</b> QR _____ AOS <u>  X  </u> MT _____	<b>DO-COR:</b> Dr. Morris Peterson <b>DO-ACOR:</b> <b>Project Director:</b> Mr. John Helmick (Westat)
<b>Status:</b> Complete (February 25, 2000 – June 30, 2000)	
<b>DO Summary</b>	
<b>Background:</b> The Army needs redesigned marketing and recruiting campaigns. To inform and guide those campaigns, new research was needed on the broad set of factors that affect youth attitudes and willingness to enter the Army. Rand researchers developed surveys for youth and their parents designed to address these research needs. The surveys needed to be administered within a very short timeframe to provide data to the Army in a timely fashion.	
<b>Project Objectives:</b> The objectives of this delivery order were to administer computer-assisted telephone interviewing (CATI) surveys to a sample of 5,000 youth and 2,500 parents. A second sample of similar size was surveyed under a related delivery order. Westat designed the sampling plan and purchased the phone numbers for the survey samples for both delivery orders.	
<b>Key Deliverables:</b> Key deliverables included a project management plan, periodic raw data files, and a final letter report.	
<b>Findings/Outcomes:</b> The required data were collected in a timely fashion, providing the input necessary to support the Army's marketing and recruiting campaign efforts.	
<b>Report Citations:</b> n/a	

<b>DO# 0019</b>	<b>Title:</b> Support for Evaluation of Basic Research Proposals
<b>Program Area</b> QR <u>  X  </u> AOS <u>     </u> MT <u>     </u>	<b>DO-COR:</b> Dr. Michael Drillings <b>DO-ACOR:</b> <b>Project Director:</b> Dr. Deirdre Knapp, with Dr. George Lawton
<b>Status:</b> Completed (March 20, 2000 – May 19, 2000)	
<b>DO Summary</b>	
<b>Background:</b> The Research and Advanced Concepts Office (RACO) of the U.S. Army Research Institute (ARI) has as a yearly requirement to evaluate basic research proposals. Evaluation requires careful reading and complete understanding of a wide variety of proposals; evaluating those proposals; and preparing a formal evaluation form for each one containing scores, detailed evaluations in various categories, and recommendations. Most of this work is done by in-house ARI scientists, however each proposal must be reviewed by multiple personnel with appropriate technical backgrounds. The reduction in ARI's work force has resulted in a greatly increased workload. Therefore, RACO required external support to accomplish the year 2000 evaluations in the time allowed.	
<b>Project Objectives:</b> The objective was to evaluate basic research proposals falling predominantly in the areas of training, leadership, and personnel selection.	
<b>Key Deliverables:</b> Reviews of basic research proposals.	
<b>Findings/Outcomes:</b> n/a	
<b>Report Citations:</b> n/a	

<b>DO# 0020</b>	<b>Title:</b> First-Term Soldier Attrition and Management
<b>Program Area</b> QR ____ AOS ____ MT <u>X</u>	<b>DO-COR:</b> Dr. Trueman Tremble <b>DO-ACOR:</b> <b>Project Director:</b> Dr. Bill Strickland
<b>Status:</b> Ongoing (May 26, 2000 – May 25, 2002)	
<b>DO Summary</b>	
<p><b>Background:</b> In 1996 the Office of the Assistant Secretary of the Army (Manpower and Reserve Affairs; ASA M&amp;RA) asked the Army Research Institute (ARI) to draft a broad-based plan for carrying out a comprehensive, integrated examination of first-term enlisted attrition. ARI's plan provided a general outline for what has become a 5- to 6-year program for investigating attrition across the first-term of the enlisted life cycle. ARI seeks to produce a comprehensive understanding of the causes of attrition over the course of the first term of enlistment. The plan calls for a longitudinal examination of the personal (e.g., expectations, background), organizational (e.g., culture and climate), and extra-organizational (e.g., attitudes of significant others, opportunities for civilian employment) variables that potentially combine to influence an individual's "fit" with and success in an organization, in this case, the U.S. Army. Work under earlier delivery orders (COMPRS #79 and COMPRS II #06 and #09) refined the plan and began data collection on the FY1999 Active Army accession cohort while its members were in the Training Base. This delivery order continues those data collection and analysis tasks into the first unit of assignment for these soldiers.</p>	
<p><b>Project Objectives:</b> The objective of this delivery order is to continue progress on the longitudinal study of attrition during the first term of service for FY1999 accessions.</p>	
<p><b>Key Deliverables:</b> Key project deliverables consist of:</p> <ul style="list-style-type: none"> <li>• Surveys for use in FY2000 and FY2001 to track the FY1999 cohort.</li> <li>• An Exit Survey for use with FY1999 cohort soldiers who leave the Army before the end of their first term.</li> <li>• Two briefings per year for ARI's Attrition Advisory Panel.</li> <li>• Two briefings per year for ARI's sponsors.</li> <li>• Two technical reports documenting progress and results over the course of FY2000 and FY2001.</li> </ul>	
<b>Findings/Outcomes:</b>	
<b>Report Citations:</b>	

<b>DO#</b> 0021	<b>Title:</b> MOS Consolidation for the Future Battlefield
<b>Program Area</b> QR <u>  X  </u> AOS <u>    </u> MT <u>    </u>	<b>DO-COR:</b> Dr. Elizabeth Brady <b>DO-ACOR:</b> <b>Project Director:</b> Mr. Allan Akman
<b>Status:</b> Ongoing (June 13, 2000 – September 5, 2000)	
<b>DO Summary</b>	
<p><b>Background:</b> The Army has been routinely faced with changing tasks, jobs, and occupational structure in response to changes in doctrine, leadership, training, and mission. Currently, the Army is faced with yet another attempt to restructure its jobs to meet the challenges of the future battlefield in the 21<sup>st</sup> Century. With advances in technology, changes in the number and range missions, and future world challenges, the Army, too, must change their approach in training soldiers who are of capable of meeting these challenges. A current study of the enlisted occupational structure by the ADS XXI Task Force has concluded that Military Occupational Specialty (MOS) requirements tend to be too narrow. Consequently it is expected that soldiers of the future will need to be multi-skilled, and their jobs be redefined to encompass these changes.</p>	
<p><b>Project Objectives:</b> The primary objective of this effort is to assess and document the feasibility of a potential MOS consolidation by using a front-end analysis (FEA) procedure on Army military occupational specialties (MOS) that represent the future battlefield. The FEA will address, at a minimum, the expected training and personnel (e.g., course length, transition training, ASVAB, physical demands, recruitment) for the MOS under study. The FEA will use the Task Knowledge Commonality Analysis Method (TKCAM).</p> <p>A secondary objective is to lay the foundation for future MOS consolidations based on this primary objective. To fully meet the challenges of the future Army, time and resources will be needed to assess all jobs within the Army. If the U.S. Army expects to be at the forefront of the future battlefield, changes to occupational structure need to be planned for now so they can be implemented in time to guarantee ultimate success in the future.</p>	
<b>Key Deliverables:</b> Final report and briefing.	
<b>Findings/Outcomes:</b>	
<b>Report Citations:</b>	

<b>DO# 0022</b>	<b>Title:</b> Pilot Test of Spanish Language Entrance Screening Test: Phase I
<b>Program Area</b> QR <u>X</u> AOS <u>   </u> MT <u>   </u>	<b>DO-COR:</b> Dr. Naomi Verdugo <b>DO-ACOR:</b> <b>Project Director:</b> Dr. Deirdre Knapp
<b>Status:</b> Ongoing (July 25, 2000 – February 27, 2001)	
<b>DO Summary</b>	
<p><b>Background:</b> Considering the rapid growth of the Hispanic population and the Census Bureau's projections for continued growth in the decades to come, a Spanish language entrance screening test can potentially expand the Army's recruiting market. Such a test would allow the Army to access highly able Spanish speakers and then provide English language training to them before they join their unit. The Army plans to offer the Spanish entrance screening test in at least nine recruiting battalions with heavily Hispanic populations. The basic plan is to enlist applicants on a provisional basis based on their performance on a Spanish language screening test and the AFQT. After accession they will be sent for ESL training and retake the ASVAB. If they fail to pass the ECLT with a score of 70 or better or do not score in Category I-IIIB on the AFQT, they will be discharged from duty.</p> <p>The effort to prepare for the implementation of the Spanish language entrance test pilot program and its subsequent evaluation will be divided into two separately funded projects. The first effort is the subject of the present delivery order. Its purpose is to evaluate existing commercial off-the-shelf Spanish language tests for similarity to the AFQT and to develop an implementation plan and evaluation plan. At least one year into the implementation of the pilot test, the contractor will begin the second, separately funded effort -- an evaluation of the pilot test.</p>	
<p><b>Project Objectives:</b> The goals of this delivery order are to support efforts to field a commercial off-the-shelf or other existing test to screen Spanish-speaking enlistment prospects for trainability. This test will be administered in Spanish. In addition to the contractor reviewing existing tests and comparing distributions of scores on the selected test as compared to the AFQT, the contractor will develop a detailed implementation plan and a detailed evaluation plan for the 24-month pilot test of this option.</p>	
<p><b>Key Deliverables:</b> The key deliverables are (a) pilot test recommendations, (b) a pilot test implementation plan, and (c) a pilot test evaluation plan.</p>	
<b>Findings/Outcomes:</b>	
<b>Report Citations:</b>	

<b>DO# 0023</b>	<b>Title:</b> Update of ARI's Officer Personnel Research Data Bases
<b>Program Area</b> QR <u>X</u> AOS <u>   </u> MT <u>   </u>	<b>DO-COR:</b> Dr. Peter Greenston <b>DO-ACOR:</b> <b>Project Director:</b> Dr. Deirdre Knapp/Ms. Winnie Young
<b>Status:</b> Ongoing (August 3, 2000 – August 2, 2001)	
<b>DO Summary</b>	
<b>Background:</b> Since the 1970s, the U.S. Army Research Institute (ARI) has maintained a set of databases that contain historical and current data on the U.S. Army officer personnel. These databases have provided a valuable resource for research and analyses in the area of policy, manpower, and personnel issues that are important to the U.S. Army. Because of the significance of these databases and the need to keep information current, regular updates must be performed. Currently, the databases are being updated every other year and the last update of 1997/98 cycle was completed in September 1999. The purpose of this project is to provide for the next cycle of 1999/2000 update as required by the Selection and Assignment Research Unit (SARU) of ARI.	
<b>Project Objectives:</b> The objectives of this effort are to provide updates for three main data bases in the Officer Personnel Research Data Bases: the Officer Administrative Data Base (OADB), the Officer Longitudinal Research Data Base (OLRDB), and the Officer Standardized Educational Testing Data Base (OSETDB).	
<b>Key Deliverables:</b> Deliverables will include the updated data bases on CD-ROM and a final report.	
<b>Findings/Outcomes:</b>	
<b>Report Citations:</b>	

## **Appendix A**

### **ARI COMPRS-II Program Descriptions**

#### **Quick Reaction (QR) Program**

Applicable Areas. The QR program is intended to give ARI a quick-response capability to perform short-term research or studies and analysis dealing with manpower and personnel issues for which the necessary in-house capability is not available. The QR Program may only be used for the procurement of non-personal services to perform the tasks specified in the DO, subject to the limitations set forth below.

Conditions. Because this program is intended to resolve manpower and personnel issues that can be studied in a short time, the following conditions will normally apply:

- Each of the QR Program DOs shall be completed within the period of time specified in the DO, with the maximum allowable completion normally being within a 12-month period from the date of the DO.
- Each task of the DO shall be completed by HumRRO or its subcontractor within the total time allocated and a final report prepared and delivered.
- Unless otherwise stated in the DO, the tasks to be performed by the Contractor shall include a meeting with ARI at Alexandria, Virginia or at an ARI Field Unit at the start of, and at the completion of, each of the QR Program DOs.

#### **Attitude and Opinion Survey (AOS) Program**

Applicable Areas. The AOS program is intended to give ARI the ability to conduct surveys to provide information for accession and force management decision-making. This information can only be obtained through surveys of the target populations and may require updating due to changing population dynamics and attitudes in the various population segments.

Conditions. Because this program is intended to provide information quickly to resolve manpower and personnel issues, the following conditions shall normally apply:

- Each of the AOS efforts shall be completed within the period of time specified in the DO, with the maximum allowable completion normally being within a 12-month period of the date of the DO or an 18-month period if Office of Management and Budget (OMB) approval is required. Each AOS survey shall be performed using standard random sampling procedures or other appropriate sampling techniques.
- The tasks written by the Government in each AOS Program SOT shall include a statement of the target group for the survey. A target group may be defined as, for example, all males, age 16-21 years old, in high school or graduated, and having positive



propensity to enlist in any military service. The Contractor shall prepare as part of its response to the SOT, the necessary screening and sampling methodologies to assure that the target group requirements are met.

- If specified in the SOT and subsequent DO, the Contractor shall prepare a survey instrument. The Government may, at its discretion, construct a proposed survey instrument and submit it to the Contractor for review and recommended changes. The approved survey instrument shall be administered by the Contractor to the target population, or a sample thereof. All reproduction, survey administration, analysis, and report generation costs shall be included in the Contractor's RFDO for an AOS survey.
- The ability to conduct surveys under the AOS program may depend on ARI obtaining OMB approval to collect the information from the public. If OMB approval is required, and if such approval is not obtained, the survey shall not be conducted. The Contractor will be notified by the Government of the status of OMB approval. Surveys involving military personnel do not require OMB approval. ARI will make the determination of approval authority prior to an SOT being issued and will clearly state in the SOT if survey administration is contingent upon any other approval authority.
- When the final survey instrument is received by the Government, it may be necessary for the DO COR to submit the survey instrument to OMB for approval. The approval process may require from four to six months. Part of the OMB submission is a detailed description of the sampling plan, including burden hours, sampling methodology, non-response analysis, etc. The Contractor shall prepare the necessary documentation in accordance with the SOT and DO requirements and submit it to the DO COR who will submit it through agency channels.
- Each DO task shall be completed by the Contractor within the time allocated and a final report delivered. The final report shall contain copies of any appropriate verbatim responses of survey participants. Unless otherwise stated in the DO, the tasks to be performed by the Contractor shall include a meeting with ARI in Alexandria, Virginia or other ARI Field Unit locations at the start of, and at the completion of, each AOS DO.
- At all times the contractor will protect the confidentiality of the survey responses.
- If OMB approval is not received, the Contractor will be paid only for those tasks in the DO which are completed, and which do not require an approved survey instrument. Each AOS DO will usually contain at least two phases as follows:

Phase I: Preparation. The tasks under Phase I will be the review or development of survey instruments, sampling methodology, preparation of approval packet (if required in the DO), and other items necessary for preparation of the survey administration.

Phase II: Survey Administration, Analyses, and Reporting. Upon receipt of survey approval, Phase II will involve the tasks necessary to conduct the survey, compile and analyze the data, prepare reports, and conduct in-person presentation of results (if required in the DO). Phase II shall always be contingent upon receipt of proper approval. If such approval for the survey is not obtained, Phase II will not be authorized and no payment for any tasks under Phase II will be made to the Contractor.

### **Medium-Term (MT) Program**

Applicable Areas. The MT Program is intended to give ARI the ability to conduct a limited number of research or studies and analysis efforts whose duration would not normally exceed 24 months after HumRRO receives a DO. The MT program may only be used for the procurement of non-personal services to perform the tasks specified in the DO, subject to the limitations set forth below.

Conditions of MT Program. This program is intended to resolve problems associated with manpower and personnel issues which require a somewhat longer period of performance than the QR program. The following conditions shall normally apply:

- Each of the MT efforts shall be completed within the period of time specified in the DO, with the maximum period normally being 24 months from the date of the DO.
- Each task of the DO shall be completed by the Contractor within the total time allocated and a final report delivered. Unless otherwise stated in the DO, the tasks to be performed by the Contractor shall include a meeting with ARI, in Alexandria, Virginia or at ARI Field Units, at the start of, and at the completion of, each MT Program DO.